

CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Canceled)

Claim 2 (Previously Presented): A shift control device attachable to the a handlebar of a bicycle for adjusting a slave piston of a slave cylinder assembly of a hydraulic shift gear mechanism, the shift control device comprising:

- a bracket attachable to the handlebar;

- a pivot shaft spaced apart from the handlebar and fixedly secured to the bracket;

- a rotating member rotatable in a first direction and a second direction about the pivot shaft;

- a control lever operatively connected with the rotating member, wherein the lever is biased in a neutral position and movable in a first and second direction, and wherein the neutral position is between the first and second directions;

- a push mechanism configured to cooperate with and rotate the rotating member in the first direction;

- a return mechanism configured to cooperate with and rotate the rotating member in the second direction;

a master cylinder assembly having a master piston operatively connected to the rotating member; and

an adjusting piston adjustably extending into the master cylinder assembly.

Claim 3 (Original): The shift control device of claim 2, wherein the push mechanism comprises a first latch segment and a push pawl biased toward the first latch segment and configured to cooperate with the first latch segment to rotate the rotating member in a first direction, and wherein the return mechanism comprises a second latch segment and a return pawl, the return pawl having a first claw and a second claw which alternately engage the second latch segment when the rotating member is rotating in the second direction.

Claim 4 (Previously Presented): The shift control device of claim 3, further comprising:

a pinion gear rotatable about the pivot shaft and operatively connected to the rotating member wherein the pinion gear rotates with the rotating member; and

a rack gear engaged with the pinion gear and operatively connected to the master piston of the master cylinder assembly, wherein the rotation of the rotating member in the first direction corresponds to a movement of the master piston in a push direction and the rotation in the second direction

corresponds to a movement of the master piston in a return direction.

Claim 5 (Previously Presented): The shift control device of claim 2 wherein the master cylinder assembly comprises a main chamber for the master piston and an adjuster chamber for the adjusting piston.

Claim 6 (Canceled)

Claim 7 (Previously Presented): A shift control device attachable to the handlebar of a bicycle for adjusting a slave piston of a slave cylinder assembly of a hydraulic shift gear mechanism, the shift control device comprising:

- a bracket attachable to the handlebar;

- a pivot shaft spaced apart from the handlebar and fixedly secured to the bracket;

- a rotating member rotatable in a first direction and a second direction about the pivot shaft;

- a control lever operatively connected with the rotating member, wherein the lever is biased in a neutral position and movable in a first and second direction, and wherein the neutral position is between the first and second directions;

- a push mechanism comprising a first latch segment and a push pawl biased toward the first latch segment and configured to

cooperate with the first latch segment to rotate the rotating member in a first direction;

a return mechanism comprising a second latch segment and a return pawl, the return pawl having a first claw and a second claw which alternately engage the second latch segment when the rotating member is rotating in the second direction;

a pinion gear rotatable about the pivot shaft and operatively connected to the rotating member wherein the pinion gear rotates with the rotating member;

a master cylinder assembly having a master piston;

a rack gear engaged with the pinion gear and operatively connected to the piston of the master cylinder, wherein the rotation of the rotating member in the first direction corresponds to a movement of the piston in a push direction and the rotation in the second direction corresponds to a movement of the piston in a return direction; and

an adjusting piston adjustably extending into the master cylinder assembly.

Claims 8-9 (Canceled)

Claim 10 (Previously Presented): A hydraulic shift gear mechanism for a bicycle having a handlebar, the hydraulic shift gear mechanism comprising:

a control lever operatively connected with the rotating member, wherein the lever is biased in a neutral position and

movable in a first and second direction, and wherein the neutral position is between the first and second directions;

a positioning mechanism actuatable by the control lever, the positioning mechanism having:

a pivot shaft;

a rotating member rotatable about the pivot shaft;

a push mechanism configured to cooperate with and rotate the rotating member in a first direction;

a return mechanism configured to cooperate with and rotate the rotating member in a second direction;

a slave cylinder assembly;

a master cylinder assembly operatively connected to the rotating member of the positioning mechanism, the master cylinder assembly having a primary piston that is movable in a push direction when the rotating member rotates in a first direction and is movable in a return direction when the rotating member rotates in a second direction;

a conduit conveying a fluid between the master cylinder assembly and the slave cylinder assembly, the conduit having a volume; and

an adjuster piston threadingly engaged with the master cylinder assembly and operable to adjust the volume of the conduit.

Claims 11-15 (Canceled)